REMARKS

Claims 2-4, 6-10 and 15-20, and 23-42 remain in the application. Claims 1, 5, 11-14 and 21-22 were previously canceled without prejudice. Claims 2-4 are hereby amended. No new matter is being added.

35 U.S.C. § 112, Second Paragraph

Claims 2-4, 6-10, 15-20 and 23-42 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite in relation to the meaning of the term "combined domain and pattern adaptive transform." Applicants respectfully submit that the meaning of this term is definite and note that this term was stated in claims 6, 7, and 8 of the original application filed in December 2001.

However, wishing to move the prosecution of this application forward in an efficient manner, applicants have amended independent claims 2, 3 and 4 to clearly specify that "the combined domain and pattern adaptive transform comprises a domain adaptive transform followed by a pattern adaptive transform." This claim language is supported, for example, on page 31, lines 13-18 of the original application which states as follows.

> In another embodiment, the pattern adaptive transform is combined with domain adaptive transform to efficiently predict data near boundaries of domains. The filter coefficients for the interior points is first by the domain adaptive technique which redistributes the weight of the coefficients corresponding to external points. Then, the patern adaptive technique is used to scale a renormalize thos weights according to the pattern adaptive technique.

Applicants respectfully submit that independent claims 2-4, as amended, now clearly and definitively indicate what is being claimed. The remaining claims

depend on claims 2-4. Hence, applicants respectfully submit that this rejection is now overcome.

35 U.S.C. § 103

Claims 2, 6-7, 9, and 17 stand rejected under 35 USC 103(a) as being unpatentable over Boon (US 6,233,279) in view of Biswas *et al.* ("Smoothing of Digital Images Using the Concept of Diffusion Process"), Otsuka *et al.* (US 4,538,184) and Tinkler *et al.* (US 6,007,052).

Claims 3-4 stand rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Jeong (US 6,393,060).

Claim 8 stands rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Richards (US 4,802,110).

Claim 10 stands rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Lei *et al.* (US 6,356.665).

Claims 15-16 stand rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Gonzales *et al.* (US 5,001,559).

Claim 18 stands rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further

in view of Salembier *et al.* (Segmentation-Based Video Coding System Allowing the Manipulation of Objects).

Claims 19, 23, and 24 stand rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Egger *et al.* (High-Performance Compression of Visual Information—A Tutorial Review—Part I: Still Pictures) and Bottou *et al.*

Claims 20, 25-30 and 33-35 stand rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Egger *et al.*

Claims 31-32 stand rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Egger *et al.* and Sharma *et al.*(US 6,385,329).

Claim 36 stands rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Egger *et al.*

Claim 37 stands rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Egger *et al.* and Decegama (WO 98/28917).

Claims 38-40 stand rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Egger *et al.* and Hong *et al.* (US 5,842,156).

Claim 41 stands rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Egger *et al.* and Decegama, further in view of Sharma *et al.* (US 6,385,329).

Claim 42 stands rejected under 35 USC 103(a) as being unpatentable over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* above, further in view of Egger *et al.* and Decegama, further in view of Iu *et al.* (US 5,361,105).

Each of the above prior art rejections relies on over Boon in view of Biswas *et al.*, Otsuka *et al.*, and Tinkler *et al.* Applicants respectfully traverse each of these rejections for at least the following reason.

The cited art does <u>not</u> disclose or suggest the limitation in each of the independent claims of "Performing a combined domain and pattern adaptive transform ... wherein the combined domain and pattern adaptive transform comprises a domain adaptive transform followed by a pattern adaptive transform"

Independent claims 2, 3 and 4 each now recite, "Performing a combined domain and pattern adaptive transform ... wherein the combined domain and pattern adaptive transform comprises a domain adaptive transform followed by a pattern adaptive transform." Applicants respectfully submit that this limitation is <u>not</u> taught in any of the cited references or the cited combinations thereof.

In regard to claim 2, the latest office action concludes that the citation to Boon does not teach the performance of a pattern adaptive transform. In particular, the latest office action states regarding Boon on page 4, lines 4-5 that "'texture signal' in col. 26, lines 37-47 is not clearly the claimed pattern". Applicants agree with the conclusion that Boon does not teach the claimed pattern adaptive transform.

The latest office action goes on to state that Otsuka *et al.* discloses "pictorial images having inherent periodic patterns ... such as textures" (page 5, lines 6-7). However, there is no assertion in the latest office action that Otsuka *et al.* teaches the performance of a pattern adaptive transform after the performance of a domain adaptive transform.

In fact, there is no assertion in the latest office action that any of the cited references teaches the performance of a pattern adaptive transform after the performance of a domain adaptive transform. Therefore, applicants respectfully submit that independent claims 2, 3 and 4, as currently amended, clearly overcome the prior art rejections in the latest office action. The remaining claims are dependent claims and so also overcome the prior art rejections in the latest office action for at least this same reason.

Compact Prosecution

Applicants respectfully note that the present application was filed back in December 2001, more than eight years ago, and that there have been eight substantive office actions so far during prosecution. Various rejections which

could have been brought up long ago in previous office actions, such as the rejection under 35 U.S.C. § 112 in the latest office action, are still being sprung in a piecemeal manner upon the applicants. This has resulted in a very inefficient prosecution process which is detrimental to both the applicants and the USPTO.

Hence, applicants respectfully request that the USPTO's own principles of compact prosecution be applied going forward with this application. The principles of compact prosecution are stated under MPEP 2106 II as follows.

> It is essential that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the initial review of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, USPTO personnel should state all reasons and bases for rejecting claims in the first Office action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, USPTO personnel should indicate how rejections may be overcome and how problems may be resolved. A failure to follow this approach can lead to unnecessary delays in the prosecution of the application.
>
> Prior to focusing on specific statutory requirements, USPTO personnel must begin examination by determining what, precisely, the applicant has invented and is seeking to patent, and how the claims relate to and define that invention. (As the courts have repeatedly reminded the USPTO: "The goal is to answer the question 'What did applicants invent?'" *In re Abele*, 684 F.2d 902, 907, 214 USPQ 682, 687 (CCPA 1982). Accord, e.g., *Arrhythmia Research Tech. v.Corazonix Corp.*, 958 F.2d 1053, 1059, 22 USPQ2d 1033, 1038 (Fed. Cir. 1992).) USPTO personnel will review the complete specification, including the detailed description of the invention, any specific embodiments that have been disclosed, the claims and any specific, substantial, and credible utilities that have been asserted for the invention.
>
> After obtaining an understanding of what applicant invented, the examiner will conduct a search of the prior art and determine whether the invention as claimed complies with all statutory requirements.

Conclusion

For the above discussed reasons, applicants respectfully submit that each of the pending claims is clearly patentably distinguished over the cited art and is now in form for allowance.

Favorable action is respectfully solicited. The Examiner is invited to call the undersigned for any questions.

Respectfully submitted,
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Dated: April 9, 2010 By: /James K. Okamoto, Reg. No. 40,110/

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